

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF TWENTY NEW SPECIES AND
A NEW SUBGENUS OF *PEROMYSCUS* FROM
MEXICO AND GUATEMALA.

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The enormous collection of mice of the genus *Peromyscus* made in Mexico and Guatemala by Mr. E. W. Nelson and his assistant, Mr. E. A. Goldman, contains many novelties, some of which are here described. Two of the new species, the largest yet discovered, are separated subgenerically under the name *Megadontomys*. Seven of the others belong to a well marked group distinguished by rather large size, long, soft and very dense fur, dark color, and a general agreement in cranial and dental characters.* It is but a step from *P. guatemalensis* of this series to *totontepecus* of the *mexicanus* series, and another step covers the related *tehuantepecus* and *ouacacensis*. Three others (*felipensis*, *gratus*, and *levipus*) belong to the *truei-difficilis* group, of which *P. hyllocetes* may be an aberrant member, and one (*musculoides*) is distantly connected with the *leucopus* series. Standing widely apart from all of these is *P. mekisturus*, an extraordinary long-tailed animal, perhaps arboreal, from the mountain slope at Chalchicomula, Puebla.

Subgenus MEGADONTOMYS nobis,

Type, *Peromyscus* (*Megadontomys*) *thomasi* sp. nov., from Mts. near Chilpancingo, Guerrero, Mexico.

Characters.—Size large (the two known species as large as roof rats); ears and tail long and very scantily haired; pelage long, soft, and very dense.

* The new species in the series in question are: *zahrynychus*, *guatemalensis*, *lepturus*, and the slightly divergent *megalops*, *auritus*, and *comptus*.

Skull similar in general to that of *Peromyscus*, but very large and massive; rostrum and nasals much produced, the latter expanded anteriorly and projecting far beyond incisors. Molars very large and heavy (the upper series in type species measuring 6.4 mm.), with short tubercles which wear off while the animal is still young, leaving flat crowns; 1st and 2d lower molars with a supplementary narrow enamel loop on each side; 3d lower molar with 3 salient and 2 reëntrant angles on each side. Plan-
tar tubercles 7. Mammæ 6: pectoral $\frac{1}{2}$, inguinal $\frac{2}{3}$.

***Peromyscus (Megadontomys) thomasi* sp. nov.**

Type from Mts. near Chilpancingo, Guerrero, Mexico (alt. 9700 ft.). No. 70142, ♂ old, U. S. Nat. Mus., Biological Survey Coll. Collected Dec. 24, 1894, by E. W. Nelson and E. A. Goldman. Orig. No 7250.

Characters.—Size very large; ears large and nearly naked; tail very long (longer than head and body) and nearly naked; whiskers large and long, reaching shoulders; hind foot very long (34 mm.); pelage long and rather coarse. Similar to *nelsoni*, but more fulvous.

Color.—End of nose black; upper parts from nose to tail fulvous, brightest and purest on cheeks and sides, darkest and abundantly mixed with black hairs on back; a blackish ring round eye; under parts white, the basal plumbeous fur showing through; pectoral region in some specimens suffused with salmon-fulvous; fore and hind feet white; ankles blackish.

Cranial and dental characters.—Skull very much elongated, particularly the rostrum and nasals; nasals produced and expanded anteriorly; supra-orbital ridges strongly developed; anteorbital vacinities drawn out on side of rostrum and only slightly notching root of zygoma; interparietal very large and broad, subtriangular; incisive foramina very large; postpalatal notch broad. Molars large with flat crowns (except in young), measuring about 6.5 mm.; crown of last lower molar elongate with enamel much convoluted, presenting 3 salient and 2 reëntrant angles on each side. So far as known species are concerned, the skull of *thomasi* requires comparison with only a single species—*nelsoni*. It differs from *nelsoni* in greater massiveness, in the possession of prominent supraorbital ridges, and in the stronger development of the posterior reëntrant angle of the last lower molar.

Measurements.—Type specimen: Total length 350; tail vertebrae 188; hind foot 34. Average of 7 specimens from type locality: Total length 330; tail vertebrae 175; hind foot 32.8.

***Peromyscus (Megadontomys) nelsoni* sp. nov.**

Type from Jico, Vera Cruz, Mexico (alt. 6000 ft.). No. 55024, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected July 10, 1893, by E. W. Nelson. Orig. No. 5202.

Characters.—Size large; ears large and nearly naked; tail very long and scantily haired. Similar to *thomasi*, but darker and less fulvous; skull lacking the supraorbital beads.

Color.—Upper parts grayish brown, becoming dusky on nose, around

eyes, and along middle of back; under parts white, the plumbeous basal fur showing through; wrists, ankles, and tail dusky; fore feet white; hind feet whitish strongly clouded with dusky.

Cranial characters.—Skull like that of *thomasi*, but less massive, lacking the supraorbital ridges, and with the posterior reëntrant angle on inner side of $m_{\frac{3}{3}}$ less pronounced. In *thomasi* the supraorbital ridges slightly overhang the orbits so that they intercept the dividers in taking the interorbital breadth; in *nelsoni* the upper surface of the frontal interorbitally is so much narrower that in taking this measurement the dividers rest on the vertical plane of the orbit about 2 mm. below the top of the frontal.

Measurements.—Type specimen: Total length 302; tail vertebræ 172; hind foot 35. Average of 2 specimens from type locality: Total length 310; tail vertebræ 171; hind foot 33.5.

***Peromyscus zarhynchus* sp. nov.**

Type from Tumbala, Chiapas, Mexico. No. 76119, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Oct. 20, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 8606.

Characters.—Size very large; ears large and nearly naked; tail very long and appearing naked; hind feet long and slender; coloration dark.

Color.—Upper parts dusky, becoming seal brown on sides (sometimes chestnut fulvous on flanks); under parts whitish, the plumbeous basal fur showing through; pectoral region strongly washed with chestnut, the chestnut suffusion sometimes spreading over belly; tail (skin) dusky above, yellowish white below; fore and hind feet whitish, the latter slightly clouded.

Cranial characters.—Skull very large and long with exceedingly elongated rostrum; small audital bullæ; weak and slender zygomata; zygomata narrow anteriorly, and only slightly notched by anteorbital slit, which is drawn out on side of rostrum as in *Megadontomys*. The skull resembles that of *Megadontomys nelsoni* in size and general appearance, but is distinguishable by the much greater length of rostrum and incisive foramina, narrower interparietal, less flaring nasals, and much smaller molar teeth. It does not require close comparison with any known species.

Measurements.—Type specimen: Total length 324; tail vertebræ 176; hind foot 35. Average of 13 specimens from type locality: Total length 314; tail vertebræ 169; hind foot 35.4.

***Peromyscus zarhynchus cristobalensis* subsp. nov.**

Type from San Cristobal, Chiapas, Mexico. No. 76109, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Oct. 2, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 8536.

Characters.—Similar to *P. zarhynchus* from Tumbala, but paler and more fulvous, with slightly smaller skull.

Color.—Upper parts dusky brown, becoming dusky on nose, around eyes, and along middle of back and everywhere mixed with fulvous tipped

hairs, the fulvous predominating on cheeks and sides; under parts, feet, and tail as in *P. zarhynchus*.

Cranial characters.—Skull similar to that of *P. zarhynchus*, but slightly shorter (averaging 30-31 instead of 32-33), with braincase broader and zygomata stronger and more spreading anteriorly.

Measurements.—Type specimen: Total length 322; tail vertebrae 170; hind foot 34. Average of 10 specimens from type locality: Total length 312; tail vertebrae 166; hind foot 33.8.

Peromyscus guatemalensis sp. nov.

Type from Todos Santos, Guatemala (alt. 10,000 ft.). No. 76861, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Dec. 31, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 8991.

Characters.—Size medium (larger than *mexicanus*, but decidedly smaller than *zarhynchus*); tail long and scantily haired; ears medium; fur long, soft, and lax; color very dark.

Color.—Upper parts dusky, finely mixed with grayish; an ill defined blackish band from side of nose to ear; cheeks and flanks dull brownish fulvous; under parts white, the plumbeous basal fur showing through; a salmon fulvous pectoral patch; wrists and ankles blackish; fore feet white; hind feet dusky at base, then white; tail dusky, irregularly paler below (sometimes white or yellowish). Some specimens have the middle part of the back nearly black and much blackish on nose. Specimens from Pinabete, Chiapas, agree closely with those from the type locality. Specimens from Cabel, Zuñil, and Volcan Santa Maria, Guatemala, are somewhat paler.

Cranial characters.—Skull and rostrum large and elongate, intermediate in size between *mexicanus* and *crisobalensis*; audital bulke as in the latter (decidedly larger than in *mexicanus*).

Measurements.—Type specimen: Total length 273; tail vertebrae 141; hind foot 31. Average of 10 specimens from type locality: Total length 268; tail vertebrae 138; hind foot 30.5.

Peromyscus lepturus sp. nov.

Type from Mt. Zempoaltepec, Oaxaca, Mexico (alt. 8200 ft.). No. 68612, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected July 8, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6381.

Characters.—A miniature of *P. guatemalensis*: size small (smaller than *mexicanus*); ears medium and nearly naked; tail about as long as head and body, slender and rather scantily haired; molars large; fur long and rather soft; color dark.

Color.—Upperparts brownish with a broad dusky dorsal area, becoming brownish-fulvous on cheeks and sides; nose and ring round eye dusky; underparts, fore feet, and small spot on end of nose whitish; wrists and ankles dusky; hind feet clouded with dusky, toes white; tail dusky above, paler below. Other specimens are so much darker as to appear dusky all over when seen from above, although the sides are always more or less brownish.

Cranial and dental characters.—Skull small and short (compared with others of the series); braincase rather broadly rounded and flattened; zygomata weak and not strongly notched by anteorbital slit; audital bullae small but slightly larger than in the decidedly larger *P. mexicanus*; molars slightly larger than in *mexicanus* and series of same length, though narrower than, in the allied but very much larger *P. guatemalensis*.

Measurements.—Type specimen: Total length 238; tail vertebrae 114; hind foot 28. Average of 5 specimens from type locality: Total length 230; tail vertebrae 112; hind foot 27.3.

Remarks.—*P. lepturus* might easily be mistaken for the young of the dark form of *mexicanus* (*totontepecus*) which also occurs on Mt. Zempoaltepec, but a glance at the skulls is sufficient to distinguish them, that of *P. lepturus* being hardly three-fourths as large as *totontepecus* while its molar teeth are even larger than those of *totontepecus*.

Peromyscus megalops sp. nov.

Type from Mts. near Ozolotepec, Oaxaca, Mexico. No. 71592, ♂ old, U. S. Nat. Mus., Biological Survey Coll. Collected March 26, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 7733.

Characters.—Size rather large; ears rather short; tail long and scantily haired; fur long and soft; coloration dark with a rich chestnut fulvous suffusion.

Color.—Upperparts finely mixed black and dark fulvous, the black predominating between ears and along back; the salmon-fulvous predominating on sides and cheeks; underparts whitish, the plumbeous basal fur showing through; pectoral region salmon-fulvous; wrists and ankles dusky; fore feet whitish; hind feet clouded.

Cranial characters.—Skull large and long, resembling that of *guatemalensis* in size and general characters but audital bullae decidedly smaller; incisive foramina much more widely open; frontals conspicuously broader and developing a distinct supraorbital bead.

Measurements.—Type specimen: Total length 282; tail vertebrae 150; hind foot 31. Average of 5 specimens from type locality: Total length 278; tail vertebrae 147; hind foot 31.

Peromyscus auritus sp. nov.

Type from Mts. 15 miles west of Oaxaca, State of Oaxaca, Mexico. No. 68438, ♀ old, U. S. Nat. Mus., Biological Survey Coll. Collected Sept. 17, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6795.

Characters.—Similar to *P. megalops*, but ears and audital bullae *very much larger* and coloration duller. Similar to *P. guatemalensis*, but paler and less fulvous, and frontal much narrower between orbits.

Color.—Upper parts grayish brown, becoming dusky on sides of nose, around eyes, and on back, with a pale dull fulvous wash on cheeks and sides; under parts whitish, the plumbeous basal fur showing through; wrists and ankles dusky; fore and hind feet whitish; tail dusky above, whitish beneath.

Cranial characters.—Skull similar to that of *auritus*, but audital bulke larger; nasals longer and more pointed posteriorly (exceeding premaxillie), and incisive foramina less broadly open. Similar to *guatemalensis*, but frontal very much broader between orbits and with a distinct supraorbital bead.

Measurements.—Type specimen: Total length 288; tail vertebræ 148; hind foot 30.5. Average of 4 specimens from type locality: Total length 281; tail vertebræ 148; hind foot 31.5.

***Peromyscus comptus* sp. nov.**

Type from Mts. near Chilpancingo, Guerrero, Mexico. No. 70191, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Dec. 24, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 7266.

Characters.—Size rather large; ears large; tail rather long and scantily haired; fur long and relatively harsh; color in winter pelage bright golden-fulvous. Similar to *P. auritus*, but pelage coarser and color much more fulvous, with much less blackish on nose and side of face, and much whiter belly.

Color.—(Adults in Dec.): Upper parts from nose to tail rich golden-fulvous, the back and rump liberally lined with black hairs; black on nose reduced to a very small spot on top and a spot at base of whiskers; blackish ring round eye very small; under parts milk-white, sometimes tinged with yellowish; wrists and ankles dusky; fore feet white; hind feet whitish, more or less clouded; tail dusky above, whitish below.

Cranial characters.—Skull like that of *auritus*, but rostrum and nasals shorter, the latter less pointed behind; molars slightly smaller.

Measurements.—Type specimen: Total length 285; tail vertebræ 150; hind foot 31. Average of 10 specimens from type locality: Total length 273; tail vertebræ 143; hind foot 30.4.

***Peromyscus mexicanus totontepecus* subsp. nov.**

Type from Totontepec, Oaxaca, Mexico (alt. 6500 ft.). No. 68624, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected July 16, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6465.

Characters.—Similar to *P. mexicanus*, but larger and darker, with slightly shorter ears and denser fur.

Color.—Upper parts dusky brown becoming dull fulvous-brown on cheeks and sides; under parts whitish, the plumbeous basal fur everywhere showing through; a salmon pectoral patch sometimes present; fore feet whitish; ankles and basal part of hind feet dusky, rest of hind feet whitish; tail dusky above, irregularly whitish or yellowish below. According to season, the prevailing color varies from dull fulvous-brown to dusky with a blackish dorsal area.

Cranial characters.—Skull like that of *mexicanus*, but interparietal and audital bulke averaging larger, and anterior root of zygoma even less notched by anteorbital slit.

Measurements.—Type specimen: Total length 261; tail vertebræ 136;

hind foot 28. Average of 10 specimens from type locality: Total length 254; tail vertebrae 130; hind foot 28.6.

Remarks.—This animal is only a mountain form of *mexicanus*, which it closely resembles. It differs far more from the geographically nearer *mexicanus orizabæ* than from true *mexicanus*.

***Peromyscus mexicanus saxatilis* subsp. nov.**

Type from Jacaltenango, Huehuetenango, Guatemala. No. 77296, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Dec. 19, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 8824.

Characters.—Similar to *P. mexicanus*, but paler, upper parts more distinctly lined with black hairs, under parts whiter.

Color.—Upper parts grayish fulvous (in some specimens fulvous), everywhere conspicuously lined with black hairs, which on middle of back form a distinctly darker area; cheeks and sides fulvous, usually pale; face between eyes grayish, slightly tinged with pale fulvous and grizzled by dark hairs; end of nose (except whitish tip), patch at base of whiskers, and narrow ring round eye blackish; under parts, including lips, wrists, and fore feet, white; ankles dusky; hind feet white; tail dusky above, irregularly whitish or yellowish below.

Cranial characters.—Skull like that of *mexicanus*, but with even less distinct supraorbital beads, smaller incisive foramina, and smaller molars.

Measurements.—Type specimen: Total length 238; tail vertebrae 122; hind foot 27.5. Average of 10 specimens from type locality: Total length 245.5; tail vertebrae 127.5; hind foot 27.5.

***Peromyscus mexicanus orizabæ* subsp. nov.**

Type from Orizaba, Vera Cruz, Mexico (alt. 4200 ft.). No. 58197, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected Jan. 29, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 5787.

Characters.—Size medium; ears large and nearly naked; tail long and nearly naked; coloration dark. Skull with broadly spreading zygomata. Similar to *P. mexicanus*, but differing in slightly larger size, decidedly longer tail and hind feet, slightly more white on hind feet, and decidedly more spreading zygomata.

Color.—Upper parts: top of head and back dusky seal-brown from intimate mixture of black and chestnut, the black predominating and shading into dull chestnut-fulvous on sides and cheeks; top and sides of nose and ring round eye dusky; underparts, including lips, wrists, and fore feet, white; ankles dusky; hind feet whitish, clouded basally with dusky; a pale salmon suffusion on pectoral region, sometimes extending over breast; tail dusky above, irregularly whitish or yellowish below.

Cranial characters.—Skull like that of *mexicanus*, but zygomata decidedly stronger, more squarely and widely spreading anteriorly, and more deeply notched by anteorbital slits; the vertical lamina on outer side of slit much more prominent.

Measurements.—Type specimen: Total length 257; tail vertebrae 139;

hind foot 29.5. Average of 10 specimens from type locality : Total length 258; tail vertebrae 138; hind foot 29.

***Peromyscus tehuantepecus* sp. nov.**

Type from Tehuantepec, Oaxaca, Mexico. No. 75302, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected May 23, 1895, by E. W. Nelson and E. A. Goldman. Orig. No. 7980.

Characters.—Size medium; ears medium and nearly naked; tail medium, scantily haired; color brownish or buffy-fulvous. Similar to *P. mexicanus*, but very much paler and with distinctive cranial characters.

Color.—Upper parts pale brownish-fulvous, slightly darkened on back by admixture of black hairs, becoming pure buffy-fulvous on cheeks and sides; under parts and lips whitish, often tinged with yellowish or buffy and with a buffy-salmon suffusion on pectoral region; ankles dusky in front, the dusky reaching out a short distance on metatarsus; fore and hind feet whitish; tail dusky, its under side irregularly marked with yellowish.

Cranial characters.—Skull similar to that of *mexicanus*, but braincase and zygomata narrower; rostrum larger; *interparietal* decidedly larger.

Measurements.—Type specimen: Total length 243; tail vertebrae 124; hind foot 26. Average of 4 specimens from type locality: Total length 248.5; tail vertebrae 127; hind foot 27.

***Peromyscus oaxacensis* sp. nov.**

Type from Cerro San Felipe, Oaxaca, Mexico (alt. 10,000 ft.). No. 68426, ♂ yg. ad. U. S. Nat. Mus., Biological Survey Coll. Collected Sept. 1, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6700.

Characters.—Size medium, about equalling *P. mexicanus*; ears medium and nearly naked; tail long and scant haired but decidedly more hairy than in *mexicanus* and its subspecies, from which it differs further in being sharply bicolor.

Color.—Upperparts from nose to tail dull fulvous, darkened on back by admixture of black hairs; a very narrow dusky ring round eye; underparts, lips, and fore feet white; ankles dusky; hind feet white except at extreme base, where dusky of ankles reaches down a short distance; tail dusky above, white below. Specimens from Mts. 15 miles west of Oaxaca show two pelages, one considerably darker than that here described.

Cranial and dental characters.—Skull similar to that of *mexicanus*, but postpalatal notch much broader; auditory bulke larger; m^2 narrower and less bellied on inner side behind anterior cusp; m_1 with a supplementary narrow enamel loop on outer side in front of posterior cusp.

Measurements.—Type specimen: Total length 242; tail vertebrae 122; hind foot 27.

***Peromyscus felipensis* sp. nov.**

Type from Cerro San Felipe, Oaxaca, Mexico (alt. 10,200 ft.). No. 68409, ♂ ad. U. S. Nat. Mus., Biological Survey Coll. Collected Aug. 22, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6611.

Characters.—Similar to *P. difficilis* Allen, but slightly larger and very much darker, with slightly smaller ears and much coarser pelage. Ears large and appearing naked; tail long and well haired; bicolor.

Color.—Upper parts dusky grayish; under parts, lips, and sides of nose white, the plumbeous basal fur showing through; pectoral region usually salmon; ring round eye dusky; ankles dusky; fore and hind feet white; tail bicolor, dusky above, whitish below.

Cranial characters.—Skull rather large; braincase well rounded; audital bulke large and inflated. Compared with *P. difficilis* the skull is slightly larger and the rostrum slightly heavier.

Measurements.—Type specimen: Total length 238; tail vertebræ 125; hind foot 27.5. Average of 10 specimens from type locality: Total length 241.5; tail vertebræ 127; hind foot 26.8.

***Peromyscus gratus* sp. nov.**

Type from Tlalpam, Valley of Mexico. No. 50619, ♀, U. S. Nat. Mus., Biological Survey Coll. Collected Nov. 30, 1892, by E. W. Nelson. Orig. No. 3927.

Characters.—Size small; ears large; tail a little longer than head and body and well haired; color pale fulvous. Similar to *P. truei*, but more highly colored; ears shorter and tail longer.

Color.—Upper parts pale buffy-fulvous, everywhere darkened by admixture of black hairs; under parts milk-white; ankles dusky all round except along outer side of calcaneum, which is white; fore and hind feet white; tail dusky, indistinctly paler on under side.

Cranial characters.—Skull small; braincase very globular and smoothly rounded; frontals rather broad interorbitally, but without trace of supra-orbital bead; rostrum small; zygomata rather weak but strongly notched by anteorbital slit; audital bulke very large and inflated. The skull resembles that of *truei*, but is smaller, with decidedly smaller rostrum and shorter palate.

Measurements.—Type specimen: Total length 209; tail vertebræ 114; hind foot 23. Average of 10 specimens from type locality: Total length 204; tail vertebræ 110.5; hind foot 22.8.

***Peromyscus levipes* sp. nov.**

Type from Mt. Malinche, Tlaxcala, Mexico (alt. 8400 ft.). No. 53673, ♂ ad., U. S. Nat. Mus., Biological Survey Coll. Collected May 12, 1893, by E. W. Nelson. Orig. No. 4799.

Characters.—Size medium or rather small; ears rather large; tail slightly longer than head and body, well haired and bicolor. Similar to *P. gratus*, but color duller, tail sharply bicolor instead of only faintly paler below, and skull different.

Color.—Upper parts grayish-brown becoming pale buffy-fulvous on cheeks and lower sides; under parts and lips white with a salmon suffusion on pectoral region; ankles dusky; fore and hind feet white; tail dusky above, whitish below.

Cranial characters.—Skull resembling that of *P. gratus*, but larger, braincase flatter; zygomata more spreading and less notched by anteorbital slit; rostrum heavier as seen from below; audital bullæ smaller; nasals longer.

Measurements.—Type specimen: Total length 200; tail vertebrae 102; hind foot 23.5.

***Peromyscus hyllocetes* sp. nov.**

Type from Patzcuaro, Michoacan, Mexico (alt. about 8000 ft.). No. 50423, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected July 27, 1892, by E. W. Nelson and E. A. Goldman. Orig. No. 2961.

Characters.—Size medium; ears medium; tail shorter than head and body well haired and sharply bicolor. Color grayish.

Color.—Upperparts buffy gray becoming buffy ochraceous on sides and with a broad dark dorsal area resulting from bountiful admixture of black hairs; underparts, lips, and fore feet whitish; wrists and ankles dusky, the color of latter spreading over basal part of hind foot; tail dusky above, white below.

Cranial characters.—Skull rather broad and short, with moderately spreading zygomata and no supraorbital beads: braincase rather full and broadly rounded; audital bullæ smaller than in the *truci-difficilis* group, but larger than in *mexicanus* and slightly larger than *oaxacensis*.

Measurements.—Type specimen: Total length 238; tail vertebrae 114; hind foot 25. Average of 3 specimens from type locality: Total length 232; tail vertebrae 112; hind foot 26

***Peromyscus musculoides* sp. nov.**

Type from Cuicatlan, Oaxaca, Mexico (alt. 1800 ft.). No. 69661, ♂ old, U. S. Nat. Mus., Biological Survey Coll. Collected Oct. 14, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 6892.

Characters.—Size a little larger than *Mus musculus*, which it greatly resembles; pelage short, close and rather coarse; ears rather short; tail shorter than head and body, moderately haired, bicolor.

Color.—Upperparts drab gray, becoming brownish on sides; underparts, lips and sides of nose milk-white; ankles dusky; fore and hind feet white; tail brownish above, whitish below.

Cranial characters.—Skull small; braincase rounded; frontals broad between orbits but without trace of 'bead'; zygomata strongly notched by anteorbital slits; audital bullæ small.

Measurements.—Type specimen: Total length 187; tail vertebrae 88; hind foot 22.5. Average of 10 specimens from type locality: Total length 185; tail vertebrae 84.5; hind foot 22.5.

***Peromyscus mekisturus* sp. nov.**

Type from Chalchicomula, Puebla, Mexico (alt. 8400 ft.). No. 64108, ♀ ad., U. S. Nat. Mus., Biological Survey Coll. Collected March 16, 1894, by E. W. Nelson and E. A. Goldman. Orig. No. 5951.

Characters.—Size small; ears large; tail enormously elongated and moderately haired; fur long and soft; color grayish-fulvous.

Color.—Upper parts gray anteriorly, becoming more and more suffused with olivaceous-fulvous to the rump, which is pale fulvous; back slightly darkened by black hairs, but no dark dorsal area; nose gray, with a small whitish fleck on extreme tip; ring round eye dusky; under parts buffy-whitish, becoming buffy on pectoral region and whitish on chin, lips, and sides of nose; wrists dusky; fore feet white; front of ankles and upper two-thirds of metatarsus dusky; rest of hind feet, toes, and sides of ankles white; tail dusky, indistinctly paler below.

Cranial characters.—Skull small; rostrum short and narrow; zygomata squarely but narrowly spreading anteriorly, the outer sides strongly convergent anteriorly; frontals narrow interorbitally without trace of supra-orbital bead; braincase broad and rather flat; interparietal narrow; auditory bullae small.

Measurements.—Type specimen: Total length 249; tail vertebrae 155; hind foot 24.

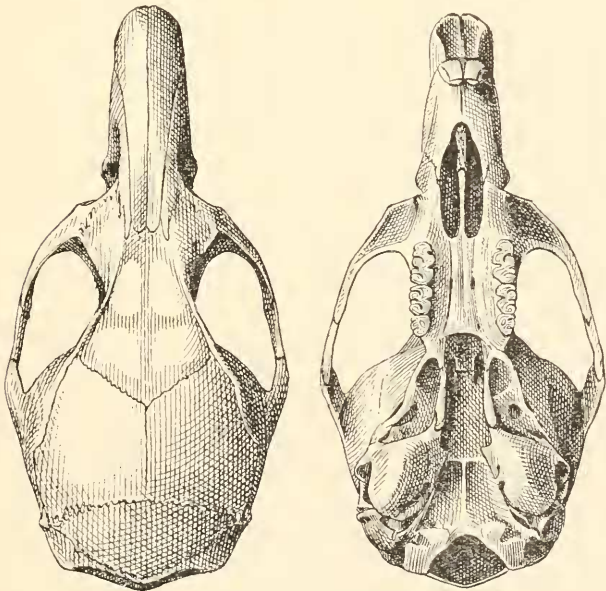


FIG. 20.—Skull of *Megadontomys thomasi* ($\times 1\frac{1}{2}$).

See page 115.